

Application No. 10/736,535
Amendment dated October 15, 2009
Reply to Office Action of July 20, 2009

AMENDMENTS TO THE CLAIMS:

1-16. (Canceled)

17. (Currently amended) A method for permanently occluding a vein through the combined disruption of a vein vessel wall and application of sclerosant, comprising the following steps:

advancing an elongated intraluminal member through the vein to a treatment site in the vein;

moving the intraluminal member against the vein's endothelium lining at the treatment site to disrupt the lining endothelium and ensure it is damaged and rendered susceptible to sclerosant; and

injecting sclerosant into the vein at the treatment site and onto the damaged susceptible endothelium, thereby causing it irreversible damage to the disrupted lining at the treatment site and consequently stimulating fibrosis of the vein at the treatment site, thereby permanently occluding the vein.

18. (Currently amended) The method according to claim 17, wherein the step of moving comprises scraping the intraluminal member against the endothelium vein's lining.

19. (Previously presented) The method according to claim 17, wherein the intraluminal member comprises a hollow infusion wire, and the sclerosant is injected into the vein through the hollow infusion wire.

Application No. 10/736,535

Amendment dated October 15, 2009

Reply to Office Action of July 20, 2009

20. (Original) The method according to claim 17, wherein the elongated intraluminal member is a balloon catheter.

21. (Canceled)

22. (Canceled)

23. (Previously presented) The method of claim 17, further comprising withdrawing the intraluminal member through the vein while scraping and injecting sclerosant.

24. (Previously presented) The method of claim 17, wherein the intraluminal member is advanced through a sheath, and the sclerosant is injected into the vein through an annular space between the intraluminal member and the sheath.

25. (Previously presented) The method of claim 17, wherein the vein has a size at the treatment site of 2-10mm.

26. (Currently amended) The method of claim 17, wherein scraping comprises rotating the intraluminal member in the vein under the control of a motor so that a portion of the intraluminal member engages the endothelium lining.

Application No. 10/736,535
Amendment dated October 15, 2009
Reply to Office Action of July 20, 2009

27. (Currently amended) The method of claim 26, wherein the portion of the intraluminal member that engages the ~~lining~~ endothelium is sharpened.
28. (Previously presented) The method of claim 17, wherein the intraluminal member curves at a distal end.
29. (Previously presented) The method of claim 17, wherein the intraluminal member is simultaneously rotated and moved longitudinally.
30. (Currently amended) The method of claim 17, wherein the sclerosant is injected during ~~moving~~ scraping.
31. (Previously presented) The method of claim 30, wherein the intraluminal member is rotated and moved longitudinally during scraping.
32. (Currently amended) The method of claim 30, wherein the endothelium of the vein's lining is disrupted without perforating the vein.
33. (Previously presented) The method of claim 17, wherein moving the intraluminal member comprises moving it longitudinally.

34. (New) The method of claim 18, wherein the sclerosant is injected during scraping.

35. (New) A method for the treatment of venous stasis through vascular ablation, comprising the following steps:

advancing an elongated intraluminal member through a vein;

activating the intraluminal member to disrupt or irritate the endothelial surface of a vein wall of the vein and ensure the endothelial surface is damaged and rendered susceptible to a sclerosing agent;

injecting sclerosant into the vein, and onto the damaged susceptible endothelial surface, in conjunction with the activation of the intraluminal member;

wherein the combined steps of activating and injecting result in ablation of the vein.

36. (New) The method according to claim 35, wherein the step of activating includes moving the intraluminal member against the endothelial surface to cause disruption or irritation of the vein.

37. (New) The method according to claim 35, wherein the intraluminal member comprises an infusion wire.

38. (New) The method according to claim 35, wherein the elongated intraluminal member is a balloon catheter.

39. (New) The method according to claim 35, wherein the step of activating includes disrupting or irritating the endothelial surface of the vein wall of the vein in a manner creating spasm of the vein.

40. (New) The method according to claim 35, wherein the intraluminal member is protected by a sheath, and the step of activating includes withdrawing the sheath to expose the intraluminal member to the vessel and vessel wall.

41. (New) The method according to claim 40, wherein the step of withdrawing the sheath is done before disrupting or irritating of the endothelial surface of a vein wall of the vein.

42. (New) The method according to claim 35, wherein the step of injecting sclerosant is performed during activating the intraluminal member for disrupting or irritating the endothelial surface of the vein wall.

43. (New) The method according to claim 35, wherein the step of injecting sclerosant is performed before activating the intraluminal member for disrupting or irritating the endothelial surface of the vein wall.

Application No. 10/736,535

Amendment dated October 15, 2009

Reply to Office Action of July 20, 2009

44. (New) The method according to claim 35, wherein the step of injecting sclerosant is performed after activating the intraluminal member for disrupting or irritating the endothelial surface of the vein wall.